Product Information

GBR 12909 (hydrochloride)
Item No. 15622

CAS Registry No.: 67469-78-7
Formal Name: 1-[2-[bis(4-fluorophenyl)methoxy]ethyl]-4-(3-phenylpropyl)piperazine, dihydrochloride
Synonym: 1 893
MF: C28H32F2N2O • 2HCl
FW: 523.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ max: 264, 401 nm

Laboratory Procedures
For long term storage, we suggest that GBR 12909 (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

GBR 12909 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the GBR 12909 (hydrochloride) in the solvent of choice. GBR 12909 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of GBR 12909 (hydrochloride) in these solvents is approximately 2 mg/ml.

GBR 12909 (hydrochloride) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

GBR 12909 is a potent inhibitor that blocks dopamine uptake (IC50 = 1-51 nM). It is more than 100-fold less effective at blocking serotonin or noradrenaline uptake. GBR 12909 effectively inhibits dopamine uptake in vivo, leading to consequent stimulation of dopamine receptors. GBR 12909 also inhibits pyrilamine binding to the histamine H1 receptor (IC50 = 18 nM) but poorly inhibits ligand binding to dopamine, adrenergic, acetylcholine, serotonin, and γ-aminobutyric acid receptors. It also blocks ligand binding to sigma receptors in rat brain (IC50 = 48 nM).

References

Related Products
For a list of related products please visit: [www.caymanchem.com/catalog/15622](http://www.caymanchem.com/catalog/15622)

**WARNING:** This product is for laboratory research only: not for administration to humans, not for human or veterinary diagnostic or therapeutic use.

**Safety Data**
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to our email to your institution.

**Warranty and Limitation of Remedy**
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, satiability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

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